#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014316 Address: 333 Burma Road **Date Inspected:** 23-May-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Li Jia. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

Bay 1: CB15:

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

Bay 8: CB17:

This QA Inspector observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joints CB3001G-053-026 to 042. Welder is identified as 054459. ZPMC Quality Control (QC) is identified as Liu Cheng Guang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2133.

Outside Yard:

CB11, CB12, CB13, CB14 & CB16:

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This QA Inspector observed that no significant work was being performed on the above mentioned CB's at the time when this QA was present.

Trial Assembly:

CB7 & CB9:

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

**CB8**:

This QA Inspector observed the following work in progress:

FCAW of weld joints DP204-008-009 to 012 & DP201-008-017 to 024. Welder is identified as 220063. ZPMC QC is identified as Cai Xia Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2134.

CB10:

During random inprocess inspection of this CB, this QA Inspector observed the following:

- ZPMC personnel doing fit-up of west side panel of this CB with FL3 side-panel of OBG SEG 8CE.
- ZPMC had temporarily tack welded a steel plate at the south end of side panel (SP205A) of CB10.
- Side Panel SP205A is identified as Seismic Performance Critical Members (SPCM).
- The size & length of the tack weld do not meet the requirements of AWS D1.5 2002, Table 12.2.
- The approved Shop drawing does not specify any weld in this area.
- No fabrication procedure was available with QC.
- The material composition of the temporarily tack welded steel plate is not known.
- This QA Inspector discussed this issue with ZPMC QC, identified as Mr. Feng Ya Jun; that they did not appear to comply with the Contract documents and an incident report would be raised. ABF QA was identified as Mr. He Yong.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar,Sailesh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer